

REMARKS

I. Introduction

With the cancellation herein without prejudice of claim 13, claims 11, 12, and 14 to 22 are pending in the present application. Claim 11 has been amended herein without prejudice to include the features of canceled claim 13. In view of the foregoing amendments and the following remarks, it is respectfully submitted that all of the presently pending claims are allowable, and reconsideration is respectfully requested.

Applicants note with appreciation the acknowledgment of the claim for foreign priority and the acknowledgment that all certified copies of the priority documents have been received.

II. Objection to the Drawings

The drawings were objected to under 37 C.F.R. § 1.83(a) because "[t]he drawings must show every feature of the invention specified in the claims." Office Action, p. 2.

Applicants note that 37 C.F.R. § 1.83(a) states that "conventional features disclosed in the description and claims, where their detailed illustration is not essential for a proper understanding of the invention, should be illustrated in the drawing in the form of a graphical drawing symbol or a labeled representation (e.g., a labeled rectangular box)." Accordingly, while Applicants may not necessarily agree with the merits of these objections, to facilitate matters, Figure 1 has been amended without prejudice to include labeled representations for a swirl nozzle 2s and a multi-orifice nozzle 2m. Further, the Specification has been amended herein without prejudice to include reference numerals 2s and 2m. Therefore, it is respectfully submitted that Figure 1 adequately illustrates the subject matter of the claims. No New matter has been added, and the drawings are supported by the Specification, e.g. at page 2, lines 6 to 23; page 5, lines 10 to 11; and claim 22.

In view of all of the foregoing, withdrawal of the objection to the drawings is respectfully requested.

III. Rejection of Claims 11 to 22 Under 35 U.S.C. § 102(b)

Claims 11 to 22 were rejected under 35 U.S.C. § 102(b) as anticipated by German Patent Publication No. DE3732656 ("Förster et al."). Claim 13 has been

canceled herein without prejudice, thereby rendering moot the present rejection with respect to claim 13. It is respectfully submitted that Förster et al. do not anticipate the present claims for at least the following reasons.

To anticipate a claim, each and every element as set forth in the claim must be found in a single prior art reference. Verdegaal Bros. v. Union Oil Co. of Calif., 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987). Furthermore, “[t]he identical invention must be shown in as complete detail as is contained in the . . . claim.” Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). That is, the prior art must describe the elements arranged as required by the claims. In re Bond, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990).

Claim 11, as presented, relates to an afterburner for afterburning a residual gas from at least one of a reforming process and a fuel cell process, including, *inter alia*, at least one nozzle, at least one device for providing an air supply, and a heat-resistant, open-pore ceramic foam for at least partially filling the combustion chamber, in which *the ceramic foam includes silicon carbide*. Support for these amendments may be found in the Substitute Specification, e.g., at page 4, lines 11 to 19; and canceled claim 13.

Förster et al. do not identically disclose, or even suggest, all of the claimed features of claim 11, as presented. Nowhere do Förster et al. disclose that its flame guiding tube 4, or any of its three zones A, B, or C, includes silicon carbide. Therefore, Förster et al. do not identically disclose, or even suggest, the feature that *the ceramic foam includes silicon carbide*, as provided for in the context of claim 11, as presented.

Accordingly, Förster et al. do not identically disclose, or even suggest, all of the features included in claim 11, as presented. As such, it is respectfully submitted that Förster et al. do not anticipate claim 11.

As for claims 12, and 14 to 22, which ultimately depend from and therefore include all of the features included in claim 11, it is respectfully submitted that Förster et al. do not anticipate these dependent claims for at least the same reasons more fully set forth above.

In view of all the foregoing, withdrawal of this rejection is respectfully requested.

IV. Rejection of Claims 11 to 22 Under 35 U.S.C. § 103(a)

Claims 11 to 22 were apparently rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Förster et al. and Japanese Patent Publication No. JP59131816 ("Tabata et al."). Claim 13 has been canceled herein without prejudice, thereby rendering moot the present rejection with respect to claim 13. It is respectfully submitted that the combination of Förster et al. and Tabata et al. does not render unpatentable the presently pending claims for at least the following reasons.

In order for a claim to be rejected for obviousness under 35 U.S.C. § 103(a), the prior art must teach or suggest each element of the claim. See Northern Telecom, Inc. v. Datapoint Corp., 908 F.2d 931, 934 (Fed. Cir. 1990), cert. denied, 111 S. Ct. 296 (1990); In re Bond, 910 F.2d 831, 834 (Fed. Cir. 1990). In addition, as clearly indicated by the Supreme Court, it is "important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements" in the manner claimed. See KSR Int'l Co. v. Teleflex, Inc., 127 S. Ct. 1727 (2007). Further, the Supreme Court in KSR noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. M.P.E.P. §2143.

As more fully set forth above, Förster et al. do not disclose, or even suggest, the feature that *the ceramic foam includes silicon carbide*. Tabata et al. also do not disclose, or even suggest, the feature that *the ceramic foam includes silicon carbide*, and thus, fail to cure this critical deficiency. However, the Office Action asserts that having "a ceramic foam including silicon carbide, open pores via reticulation, include and [sic] electric heater, electric glow filament and a glow plug, ignitor location, nozzles, etc., can be viewed as nothing more than mere matters of choice in design absent e [sic] showing of any new or unexpected results produced therefrom over the prior art of record." Office Action, p. 5. Applicants respectfully disagree. In this regard, it is respectfully submitted that with respect to the feature that the ceramic foam includes silicon carbide, the Specification describes certain advantages, e.g., at page 4, lines 11 to 19.

Accordingly, it is respectfully submitted that the combination of Förster et al. and Tabata et al. does not disclose, or even suggest, all of the features included in claim 11, as presented. As such, it is respectfully submitted that the

combination of Förster et al. and Tabata et al. does not render unpatentable claim 11.

As for claims 12, and 14 to 22, which ultimately depend from and therefore include all of the features included in claim 11, it is respectfully submitted that the combination of Förster et al. and Tabata et al. does not render unpatentable these dependent claims for at least the same reasons more fully set forth above.

In view of all of the foregoing, withdrawal of this rejection is respectfully requested.

V. Conclusion

It is therefore respectfully submitted that all of the presently pending claims are allowable. All issues raised by the Examiner having been addressed, an early and favorable action on the merits is earnestly solicited.

Respectfully submitted,

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